

## 03040206-130

### (Kingston Lake)

Watershed 03040206-130 (formerly 03040206-120) is located in Horry County and consists primarily of **Kingston Lake** and its tributaries. The watershed occupies 83,446 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Yonges-Nansemond-Bladen-Wahee-Pocomoke series. The erodibility of the soil (K) averages 0.19; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 29.9% forested land, 26.8% forested wetland (swamp), 26.1% scrub/shrub land, 13.5% agricultural land, 3.4% urban land, 0.1% nonforested wetland (marsh), 0.1% water, and 0.1% barren land.

Kingston Lake accepts drainage from Jacks Bay, Alligator Swamp, and White Oak Swamp. White Oak Swamp receives drainage from Little White Oak Swamp (Cane Branch), Horsepen Branch, Huckleberry Branch, Bug Swamp (Bay Gully Branch, Bayboro Branch, Hellhole Swamp), and Fox Branch. Camp Swamp enters the system next followed by Horsepen Creek, Maple Swamp (Big Baxter Swamp, Little Baxter Swamp, Horse Creek, Cross Branch, Poplar Swamp, Booth Branch, Smith Branch, Boggy Swamp), Grier Swamp (Priver Branch, Mill Branch, Long Swamp, St. Paul Branch, Brown Swamp, Mary Branch), and Crab Tree Swamp (Ned Creek, Thompson Swamp, Oakey Swamp, Beaver Hole Swamp, Altman Branch). The Kingston Lake Watershed drains into the Waccamaw River. There are several ponds (totaling 161.8 acres) in this watershed and a total of 165.6 stream miles, all classified FW.

### Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
MD-158	S	FW	CRAB TREE SWP AT LONG ST BELOW CONWAY #1 POND OUTFALL
MD-107	S	FW	KINGSTON LAKE NEAR PUMP STA ON LAKESIDE DRIVE, CONWAY

**Crab Tree Swamp (MD-158)** - Aquatic life uses are fully supported. This is a blackwater system, characterized by naturally low dissolved oxygen concentrations. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and considered natural, not standards violations. A significant increasing trend in dissolved oxygen and a significant decreasing trend in five-day biochemical oxygen demand suggest improving conditions for these parameters. A high concentration of zinc and lead were detected in the 1996 sediment sample. Chlordane was detected in the 1994 sediment sample. Recreational uses are not supported due to fecal coliform bacteria excursions.

**Kingston Lake Swamp (MD-107)** - Aquatic life uses are fully supported. This is a blackwater system, characterized by naturally low dissolved oxygen concentrations. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and considered natural, not standards violations. There is a significant increasing trend in pH. Recreational uses are not supported due to fecal coliform bacteria excursions.

## **NPDES Program**

### **Active NPDES Facilities**

**RECEIVING STREAM**

**FACILITY NAME**

**PERMITTED FLOW @ PIPE (MGD)**

**COMMENT**

**NPDES#**

**TYPE**

**LIMITATION**

MAPLE SWAMP

UNIBLEND SPINNERS/CONWAY PLT

PIPE #: 002 FLOW: 0.065

PIPE #: 001 FLOW: 0.020

WQL FOR DO,TRC,NH3N,BOD5

SC0022454

MINOR INDUSTRIAL

EFFLUENT

WATER QUALITY

## **Nonpoint Source Management Program**

### **Mining Activities**

**MINING COMPANY**

**MINE NAME**

**PERMIT #**

**MINERAL**

THOMPSON & ASSOCIATES, INC.

WEST MINE

0638-51

LIMESTONE

## **Water Supply**

Portions of this watershed fall within the Waccamaw Capacity Use Area and large groundwater uses must be reported (see Capacity Use Program p.23).

## **Growth Potential**

There is a moderate potential for residential and commercial growth in this watershed, which contains a portion of the City of Conway. Water and sewerage infrastructure is located in and around Conway, and water is available along the U.S. Hwy. 701 corridor. An industrial area is located along U.S. Hwy. 701 and should see growth due to an existing rail line and highways that make the area accessible from all directions.

## **Watershed Protection and Restoration**

### **Special Projects**

#### **Identification and Mitigation of Nonpoint Source in Kingston Lake and Crab Tree Swamp**

A number of organizations, led by Coastal Carolina University, will conduct a comprehensive project in Kingston Lake and Crab Tree Swamp. The milestones of the project include collecting urban runoff baseline data, constructing a demonstration stormwater retention pond located in a residential development to evaluate its efficacy, and producing educational materials about urban nonpoint source to inform the people living in the watershed.